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10/565,901	01/24/2006	Peter Herring	DEHN-01005US0	7477

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EXAMINER	
LIU, XUE H	

ART UNIT	PAPER NUMBER
1791	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/11/09 have been fully considered but they are not persuasive. Applicant argues that the combination of Eastelow and Chu is improper because there is no motivation to combine the references. Applicant states that since Easterlow teaches an injection process for forming a molding and aims to avoid spray paining while Chu relates to a method of spray coating a pre-molded housing, therefore there is no motivation to apply the teachings in Chu to use a magnetic filed to align metallic particles in the method of Easterlow.

2. However, Chu is only relied on for teaching that magnetic particles can be oriented by a magnetic force. One of ordinary skill in the art at the time of the invention would have realized that the teaching of Chu can be applied to any molding process including injection molding, and is not restricted to spray coating processes only. Applicant states that since the particles described in Easterlow have already been aligned by the flow of material, there is no need to do any further orientation of the particles.

3. However, it is noted that Easterlow teaches that "the spreading or flowing action causes the flakes 40 to orientate themselves so that they lie **generally** in a plane parallel with the flow or spread direction indicated by arrow F and **generally** parallel with the plane of the coating formed by the coating material 23" (see col. 5, ll. 10-14). Therefore, the particles in Easterlow are not always aligned by the flow of material; therefore it would have been obvious to one of ordinary

skill in the art at the time of the invention to further align the metallic particles using the magnetic field disclosed in Chu.

4. Applicant further argues that Easterlow does not teach that the metallic particles are ferromagnetic particles which can be manipulated by a magnetic filed.

5. However, Chu teaches that ferromagnetic particles have the advantage that they can be oriented by a magnetic force. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the ferromagnetic particles in the process of Easterlow in order to facilitate orientation of the particles in the molding process.

6. Regarding claim 61, applicant argues that there is not teaching or suggestion in the cited prior art of specifically how to apply a magnetic field during an injection molding process.

7. However, claim 61 recites that "said magnetic fields are applied in said mold before said at least one material has cured completely". Since Chu teaches that the ferromagnetic particles may be oriented in a desired array using magnetic force prior to final set up or cure (see col. 3, ll. 26-29), therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that in the combination of Easterlow and Chu, the magnetic fields are applied in the mold before the molding material has cured completely since that the ferromagnetic particles are not able to be reoriented after complete curing of the molding material. Furthermore, while claim 61 is not rejected over Jarrard (US 6,106,759), the cited prior art of record shows that it is well known in the art to apply a magnetic field during an injection molding process (see abstract).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to XUE LIU whose telephone number is (571)270-5522. The examiner can normally be reached on Monday to Friday 9:30 - 6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katarzyna Wyrozebski can be reached on (571)272-1127. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/X. L./
Examiner, Art Unit 1791

/KAT WYROZEBSKI/
Supervisory Patent Examiner, Art Unit 1791